1 BEFORE THE POLLUTION CONTROL HEARINGS BOARD 2 STATE OF WASHINGTON 3 IN THE MATTER OF NORM VEHRS dba PACIFIC BEACH 4 WATER SYSTEM, 5 Appellant, PCHB No. 82-36 6 FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW AND STATE OF WASHINGTON, ORDER DEPARTMENT OF ECOLOGY, and 8 UNITED STATES DEPARTMENT OF THE NAVY, WESTERN DIVISION, 9 Respondents. 10

This matter, the appeal from an order granting a permit to appropriate ground water, came before the Pollution Control Hearings Board, David Akana (presiding) and Gayle Rothrock, at a formal hearing on May 27 and 28, 1982, in Lacey, Washington.

Appellant was represented by his attorney, Lawrence L. Tracy; respondent Department was represented by Robert E. Mack, Assistant Attorney General; respondent permittee was represented by its attorney, Norman J. Furuta. Court Reporters Betty Koharski and Lois

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Fairfield recorded the proceedings.

Having heard the testimony, having examined the exhibits, and having considered the contentions of the parties, the Board makes these FINDINGS OF FACT

Ι

On July 13, 1981, the Department of the Navy (Western Division, Naval Facilities Engineering Command) applied for a permit to appropriate public ground water of the state of Washington in application No. G2-25958. The proposed appropriation was to withdraw up to 300 gallons per minute (GPM) continuously to a maximum of 22 acre-feet (AF) per year from three wells for domestic water use at the Naval Facility in Pacific Beach, Washington. Water for fire protection was also requested, as needed.

ΙI

Appellant Norm Vehrs dba Pacific Beach Water System holds two certificates of ground water rights, No. 304-D and G2-00988C. The location of diversion for both certificates is within Lot 6, Block 18 of Highland Heights addition in Pacific Beach.

Certificate No. 304-D, with a priority date of July 1, 1923, entitles appellant to withdraw up to 300 GPM and 42 AF per year for a commercial water system serving Pacific Beach in Grays Harbor County.

Certificate No. G2-00988C, with a priority date of November 5, 1971, certifies the right to withdraw from a well up to 300 GPM and 252 AF per year for municipal supply for use in the area served by Pacific Water Company within Township 20 North, Range 12 W.W.M. in

Grays Harbor County.

Appellant contends that the Department of the Navy's (hereinafter "Navy") proposed appropriation will impair his prior existing rights.

Appellant has two other wells known as the Evergreen System, for which there is no issue in dispute.

III

The Navy facilities are located within the area presently served by appellant and are being provided with water from appellant's system. The Navy's dissatisfaction with the quality and service of appellant's product prompted the move to secure a separate water system and ultimately, this appeal. This dissatisfaction occurred during the period at appellant's ownership of the water system and prior thereto.

ΙV

There are three drilled well holes in the Pacific Beach vicinity under appellant's control. The first, Well No. 1 (Exhibit A-3), serves the entire needs of appellant's service area, including business, residential, and the Naval Facility. Presently, the well is equipped with a 300 GPM pump but because of the treatment system, can only provide up to 135 GPM of water. The well is believed to be drilled 190 feet deep. It has an eight-inch casing. The static water level (SWL) is at about 89 feet; well drawdown at 300 GPM was recorded at 21 feet. The well is located about 700 feet from the ocean and at an elevation of 105 feet. Sometime before, the water intake which is not screened, was raised ten feet to a 164-foot depth to avoid sand.

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The total system used in 1981 was about 7 million cubic feet (161

AF--126 AF in 1980) per year. The Navy accounts for about 15 percent

of that total. The system capacity is strained during periods of high

use.

The second well, Well No. 2, is located about 150 feet east of Well No. 1. It was drilled in the 1950's and serves as an auxiliary water source for Pacific Beach. It is drilled to a depth of 250 feet and has a 10-inch casing. The exact SWL is presently unknown but has been recorded at 100 feet. Because of the presence of sand in the well, the water is not regularly used in the system. There was no evidence of a water right for the well.

The third well is a capped and abandoned well located about 40 feet east of Well No. 1. The records show that the well was drilled in 1923 to a depth of 132 feet and had a six-inch casing. Certificate No. 304-D was issued for the well. In 1975, the volume of water to be withdrawn was increased to 252 AF per year, supplementary to certificate 304-D. This later change is evidenced in the records associated with certificate No. G2-00988C. There is no persuasive evidence that an application for a change in point of withdrawal was made. The abandoned well is the only well for which a well driller's log was prepared. The abandoned well and Well No. 1 are each located within the same recorded platted property on both the certificates, however.

The Navy property is located next to appellant's Well No. 1 and

abandoned well sites. It would be possible for the Navy to drill one of its three wells about 100 feet from appellant's operating well. Using the maximum withdrawal rate allowed at Well No. 1 and the maximum proposed withdrawal rate (300 GPM) at 100 feet away, there would be an increase of 12 feet in drawdown at Well No. 1. This increase concerns appellant because the projected drawdown at 300 GPM at Well No. 1 is presently estimated to be at or about mean sea level. There is a moderate potential for salt water to enter the fresh water aquifer under the foregoing situation. If this should occur, it could be difficult to clear the aquifer, and a new supply of water would be required.

VΙ

The Navy's proposed appropriation is less intensive than as portrayed by appellant, however. First, the three wells will each be equipped with a 100-GPM pump, rather than a 300-GPM pump as assumed. Second, the Navy does not intend to locate a well any closer than 200 feet from Well No. 1. Other wells would be spaced apart 50 to 100 feet farther away. Third, the actual continuous domestic use at the Navy, using a 150,000 gallon storage tank, would be only about 13 GPM. The remaining water flow rate would be available for fire protection on an as-needed basis. Fourth, the water to be used by the Navy for domestic purposes is limited to 22 AF per year. Pumping at 300 GPM continuously would result in exhausting the water right volume limit in about 17 days. It is not realistic to assume that the known domestic rate of use would be so expended. Fifth, the ground water

recharge in the area ranges between 320 and 1,280 AF per year, with an average recharge of about 724 AF per year. Using appellant's withdrawals in 1980 of 126 AF, or his estimated 1981 figures of 161 AF, and adding to it the proposed 22 AF withdrawal of the Navy results in a figure well within the low recharge figure. Appellant's well and the proposed Navy wells would be the only major permitted wells in the immediate vicinity at this time. The total number of wells per acre presently in the vicinity, including other domestic wells, do not ordinarily result in interference between wells in the type of soil at the site.

VII

There are other factors which indicate that the Navy's proposed appropriation would not now interfere with appellant's well. First, appellant has not used and is not presently capable of using more than 135 GPM and about 161 AF per year, fire flow excepted. Second, that use would decline in the amount that the Navy's use would increase.

VIII

The actual potential for salt water intrusion is probably low given the Navy's appropriation of between 13 and 100 GPM at one well, rather than 300 GPM as assumed by appellant. Moreover, the Navy wells would not be closer than 200 feet from Well No. 1.

IX

The provision for monitoring chloride concentration in the proposed permit is prudent on any appropriation near the ocean. It would also be prudent to space the Navy's three wells and devise a

1 pumping scheme that would minimize any possibility of salt water intrusion in the aguifer. Х

Appellant did not establish that the pumping water level would be significantly affected by the proposed appropriation. The preponderance of the evidence establishes the contrary.

XΤ

Any Conclusion of Law which should be deemed a Finding of Fact is hereby adopted as such.

From these Findings the Board enters these CONCLUSIONS OF LAW

T

RCW 90.44.060 makes certain provisions of ch. 90.03 RCW applicable to ground water appropriations. RCW 90.03.290 requires the department to make essentially four determinations prior to the issuance of a surface water permit: (1) what water, if any, is available; (2) to what beneficial uses the water is to be applied; (3) will the appropriation impair existing rights; and (4) will the appropriation detrimentally affect the public welfare. Stempel v. Department of Water Resources, 82 Wn.2d 109 (1973). (Appellant does not challenge the beneficial use aspects of the instant decision.)

Where the proposed appropriation relates to ground water, RCW 90.44.070 provides:

> No permit shall be granted for the development or withdrawal of public ground waters beyond the capacity of the underground bed or formation in the

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given basin, district, or locality to yield such water within a reasonable or feasible pumping lift in case of pumping developments, or within a reasonable or feasible reduction of pressure in the case of artesian developments.

ΙI

There was ample evidence to affirmatively show that water was available for the proposed withdrawal.

III

The relevant evidence shows that two certificates of water right are extant. The total rights appear to be 300 GPM and 252 AF per year of ground water. There is some confusion on the location of the well identified in the certificates, but resolution of that factual matter is not necessary. Even assuming the full exercise of the certificates, the proposed appropriation of 100 GPM at the closest well was not shown likely to impair either the quantity or quality of water from Well No. 1. Because prudence should be exercised along ocean shorelines, the Navy wells should be located not closer than 200 feet from Well No. 1.

Under the proposed appropriation as described in the hearing, the likelihood of salt water intrusion into the fresh water source is not probable. Prudent steps can also be taken to insure that this will not occur, such as monitoring and well spacing.

Next, RCW 90.54.020(7) provides:

Development of water supply systems, whether publicly or privately owned, which provide water to the public generally in regional areas within the state shall be encouraged. Development of water supply systems for multiple domestic use which will not serve the public

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generally shall be discouraged where water supplies are available from water systems serving the public.

The Navy's proposed system would supply an area already served by appellant's water system. The development of such multiple supply systems is not to be encouraged generally. However, the granting of the permit would allow the Navy to secure a source of potable water of a quality it has long sought and not yet achieved. On balance, the department's action is not inconsistent with the provisions of RCW 90.54.020 and subsection (7) thereof.

ΙV

Insofar as the provisions of RCW 70.44.070 and 90.44.130 are incorporated by the issues in this matter, the evidence shows that the aquifer in question is generously recharged. There was no evidence that any pumping lift would be unreasonably increased because of the proposed 22 AF per year withdrawal. Nor was there persuasive evidence that appellant would not be able to maintain a safe sustaining yield in the amount of his actual or potential appropriation.

The creation of the likelihood of a threat to the quality of an aquifer, such as from salt water intrusion into potable water sources, would be detrimental to the public interest or welfare. It would also be inconsistent with RCW 90.54.020(4) which provides:

Adequate and safe supplies of water shall be preserved and protected in potable condition to satisfy human domestic needs.

The proposed appropriation was not shown to be detrimental to the public welfare or interest.

The granting of a permit to appropriate ground water has not been shown to be in error. However, the permit, when issued, should include the underlying assumptions which specifically describe the proposed project, such as the minimum distance from appellant's Well No. 1, the maximum GPM withdrawal per well, and a provision for appropriate well spacing.

VI

## IIIV

Any Finding of Fact which should be deemed a Conclusion of Law is hereby adopted as such.

From these Conclusions the Board enters this

1	ORDER
2	The granting of a permit under Ground Water Application Number
3	G2-25958, as modified pursuant to Conclusion of Law VI, is affirmed.
4	DONE this 9th day of July, 1982.
5	POLLUTION CONTROL HEARINGS BOARD
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7	Davil Ollan
8	DAVID AKANA, Lawyer Member
9	Lande Roth and
10	GAYLE ROTHROCK, Vice Chairman
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